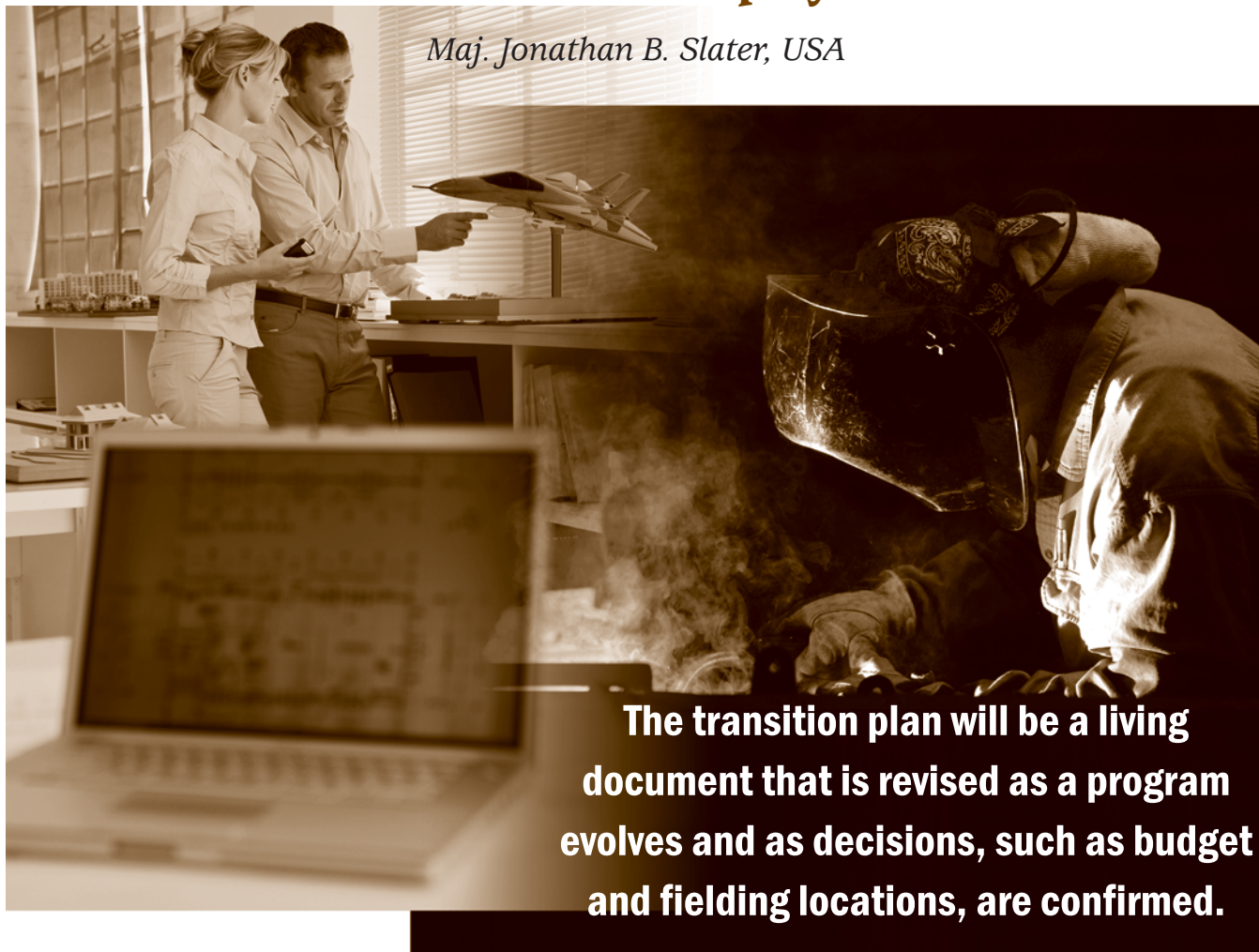# The Plan for Transition

From System Development and Demonstration to Production and Deployment

Maj. Jonathan B. Slater, USA

> **The transition plan will be a living document that is revised as a program evolves and as decisions, such as budget and fielding locations, are confirmed.**

A program manager is responsible for not only ensuring that his or her office delivers a product in an efficient manner, but also that the product meets the receiving unit needs and that the users of the product are comprehensively trained on how to use it. The program office coordinates the flow of equipment, training resources, and the user's new equipment training schedule. These responsibilities arise during the production and development phase of a product.

What follow are some thoughts on developing a plan to take an acquisition program from the system develop-ment and demonstration phase to the production and deployment phase. The concepts, thoughts, and processes described stem from experience with the Stryker Mobile Gun System (MGS) fielding process and planning for transition of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS). Although the examples provided are Army-specific programs, the lessons learned can be applied across the Department of Defense.

Critical Planning for a Critical Time

An acquisition program enters the production and deployment phase when the program reaches Milestone C, and

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Slater served as the assistant program manager for the Army's Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System. He is currently an assistant product manager for the Army's Non-Line of Sight-Launch System for the Precision Attack Missile at Redstone Arsenal, Ala. He holds a Master of Business Administration from Long Island University.

that is the point at which the transition plan is formally implemented. There are significant processes and concepts that must be planned, resourced, and executed to ensure the user receives the product or system efficiently and receives adequate training, and that the process is properly resourced during the production and deployment phase. The planning assumptions of transitioning a program are verified and validated during the low-rate initial production fielding and training, which is the first time the system or product will be fielded to users and is, therefore, a critical period for the program.

It is important to understand that the planning must be completed early in the system development and demonstration phase and will be refined as the program gets closer to production. A proactive program manager will tailor approaches to the program as it transitions into the system development and demonstration phase, thus mitigating negative impacts.

Pre-Transition Plan Items

Although the transition plan focuses on the period after Milestone C, there are several items that need to be addressed prior to the milestone. Several items will be specified in the low-rate initial production/full-rate production contract, and those areas include production line verification plans, the product/system acceptance process, and memorandums of agreement or letters of instruction/intent (MOAs/LOIs). A good PM wants to be proactive in having a plan in place, and to be ready to execute the plan as soon as the milestone decision authority gives approval of the milestone.

For large acquisition programs, the manufacturing process for the product or system requires validation. The procedures for conducting the validation should be developed by the transition planning team to ensure all parties understand the requirements. The procedures also need to address the program office's approved definition of production representative for the product/system. The definition spells out what characteristics identify the system and will be used in test analysis. The roles and responsibilities of all the parties involved are outlined in the MOAs/LOIs. To ensure program office readiness for the transition, most MOAs/LOIs should be made effective prior to Milestone C.

The acceptance process will address how the program office desires to purchase new equipment. A product/system may be bought at a system level; as individual components; or at another level, such as subsystem. It is important for the program office to address how parts of a product/system will be purchased following initial fielding. For example, repair parts may be bought at a component level, unit level or, because of the complexity and uniqueness of a program, it may be more cost effective to purchase parts at a system level. Because the acceptance process discusses purchasing, organizations such as the Defense Contract Management Agency must be involved to specify the purchasing criteria and responsibilities. The program office also needs to address maintenance support to cover non-warranty items that may not work during any follow-on testing.

Developing the Transition Plan

Transition planning is most effective when conducted by a multifunctional group from across the system/product integrated product teams, with representation from the contractor, the user community, and the product office. This team should also have representation from production, logistics, test, quality, finance, and integration teams, and from the Defense Contract Management Agency. Although the program may not be under contract to move forward beyond the system development and demonstration phase, the input from the current contractor is the best industry experience that can be used in the planning process.

Transition planning is not directly intended to impact the system development and demonstration phase of a program. However, several of the decisions made during the development of the transition plan will assist the system development and demonstration process in accomplishing the demonstration system objectives. For example, the development of a product acceptance process for the low-rate initial production/full-rate production products of the JLENS system has clarified acceptance criteria for several subsystem items, such as the mobile mooring station, will be used during system acceptance/buy-off for the system development and demonstration systems.

Characteristics of a Plan

A transition plan should be as comprehensive and detailed as possible and should also provide a financial estimate to be used in program budgeting. The plan should be presented in both a presentation format (such as in Microsoft® PowerPoint) and as a white paper. The presentation is used to communicate your plan to senior leadership. Also, when giving a new materiel introduction briefing, the presentation you develop can also be tailored and presented to the leaders of the unit who requested the product.

There are several overarching ideas that must be addressed by senior leadership before or during the transition planning period. Much of the transition plan will be based on the following decisions:
- Where the system/product will be fielded
- What the plan for sustainment training is, if required
- What resources are critical to meet the system operator new equipment training exit criteria
- What deployment timelines must be met
- The concept of operation for the system.

> A proactive program manager will tailor approaches to the program as it transitions into the system development and demonstration phase, thus mitigating negative impacts.

Those critical decisions, explained in further depth in the following paragraphs, will direct and may constrain the options available to the program manager in transitioning his or her program. The users of the product should be included in the initial guidance. Additionally, senior-level Department of Defense agencies, such the Office of the Secretary of Defense, may also need to be involved in developing input to the critical decisions. It is important to realize that the implementation of the transition plan for the active duty units may require revision if they are to be used for the National Guard and Reserve units, which have specific needs.

Developing a Timeline
The first step in creating the plan is the development of an overarching transition concept, which will address how the plan envisions the new equipment training for the operator throughout the operation and support phase of the system/product's life cycle. The transition plan on the following page illustrates how personnel and equipment are brought together. The lower section of the chart depicts areas that are ongoing and that the program must have plans to address.

Fielding
Based on the type of program, fielding can be an extremely complex process. Fielding must address how all components of the system—weapon systems, associated support items of equipment, and basic-issue items—will be fielded to the unit, either before or after it is fielded to the operator for new equipment training. Fielding will be based on the program office's plan for equipment flow, to including all system government-furnished equipment not integrated into the contractor equipment (such as trucks and generators), and the contractor-furnished equipment. Options for the equipment flow will include transporting it all to one location and issuing it to the unit all at once, or splitting the delivery and having some items that are noncritical to training sent directly to the unit home station.

Fielding may be conducted at a single location, multiple locations, or a combination of both. Both the Stryker MGS fielding and the current fielding plan for JLENS are very complex. The systems have multiple components, and both require the integration of government-furnished equipment and contractor-furnished equipment. Both must complete a final system-level check prior to government acceptance. In the Stryker MGS Program, a deprocessing yard was established, as had been the process for all the other Stryker variants. The purposes of the deprocessing yard are to combine all remaining components, address any factory shipment shortage, and complete a final system integration and test. All of this work is conducted at a single location, where a product office fielding officer, support team, contractor fielding team, and maintenance team are collocated to manage the process. At the completion of the deprocessing, the system is issued to the user.

A transition plan must address if and how this fielding process will be conducted, what facilities are required for both the government and the contractor, what the logistics support plan is, (including support equipment, test equipment, spares, etc), as well as equipment storage/staging area requirements (motor pools/secure lots).
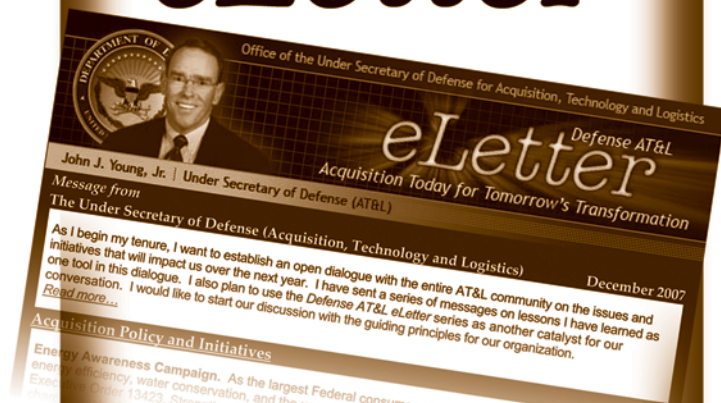
Training
All newly fielded systems require users to be trained on operation, maintenance, and employment. This training will most likely be broken into two areas: the operator new equipment training and the field-level maintainer new equipment training. The PM must provide the unit with trainers, who are typically from the prime contractor, and equipment. The equipment used for training may be either a training set or the actual equipment issued to the unit, based on equipment availability and direction from the user community.

New equipment training is closely coordinated with the user community, which will develop entrance and exit criteria for the operator's and the field-level maintainer's training event. Entrance criteria are items that the unit must complete and prove its proficiency at prior to conducting the training. For example, JLENS will require that the user is able to operate and pass information on an FM radio network. Exit criteria are the requirements of training proficiency of the user at the end of new equipment training. An example is the Stryker MGS gunnery training at the MGS crew intermediate qualification level.

Additionally, the project office's plan for fielding and training of training aids, devices, simulators, and electronic training media needs to be identified. The overall sustainment training concept from the user community needs to match up with the training aids and equipment provided by the program. When looking at training, the transition team needs to understand how the unit will train the system in the field and what they will need to conduct its training. Most defense units train with their equipment in the local training area. However, in the case of JLENS, which is an extremely complex and large system and requires a specially prepared operational site, specially designed tactical training sites must be developed.

Lastly, training resources, such as ranges, must be identified early to begin coordination with the garrisons to determine if requirements can be addressed on existing ranges or to facilitate development of new infrastructure. For example, several new ranges were developed to support MGS gunnery at multiple fielding locations. This was a major undertaking by the product office, the user community, and the installation support groups.
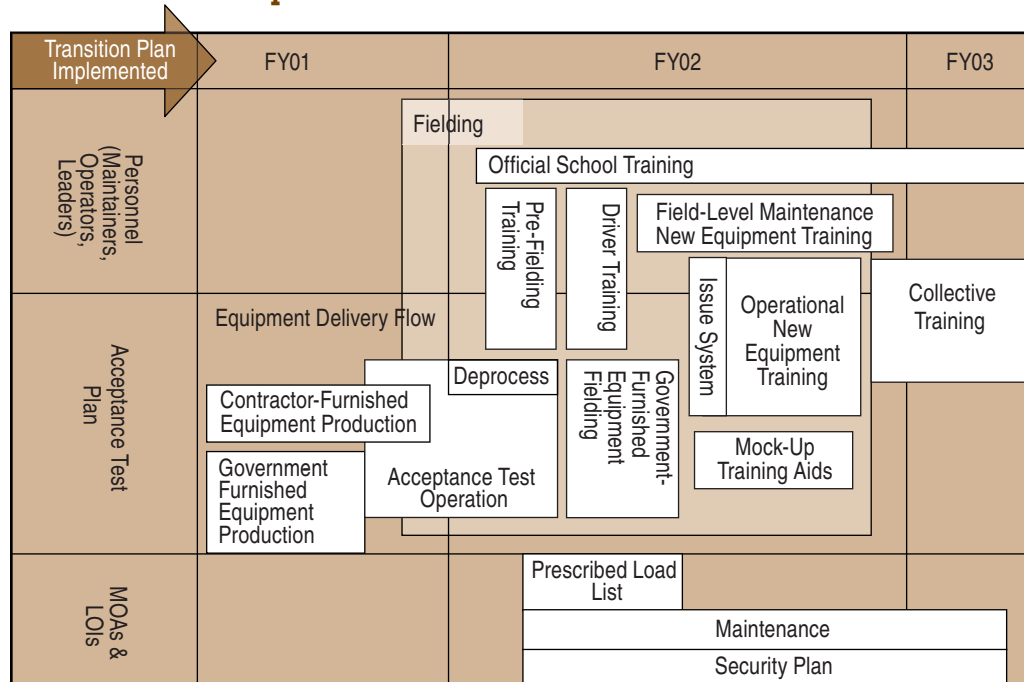
Personnel
Personnel-related issues can impact a program significantly. Training and fielding requirements of the system may require certain skill sets and specific types of personnel to be available for training sooner than the entire unit. As a result, prioritization of unit fills and tight management of critical positions must be planned by the product office and the training capabilities personnel. JLENS, for example, requires a broad range of military occupational skills, some of which are high demand or limited availability. A flight director, for example, is a unique and new position that will require extensive training at a dedicated flight training facility. The trained flight director must be available early enough to complete the training and support the unit's collective training in JLENS.

Financial
Because of the depth and breadth addressed by a transition plan, the plan will have significant financial implications. It is critical to develop the plan as early in the program as possible in order to influence financial requirements and the budgeting process. Requirements that generate facilities development may be subject to the military construction budget cycle and may cause program decisions to be adjusted, such as fielding location priorities based on availability of those facilities. Only a plan that is appropriately financed will be executable. Requirements that have financial implications should be identified by a team of both contractor and government personnel. Many of the decisions made in the transition plan will translate into requirements that the contractor will provide as a capability during the production and deployment phase and, therefore, are incorporated into the request for proposal.

Transition Concept

Transition Plan Implemented	FY01	FY02	FY03

Figure showing transition concept timeline across FY01, FY02, FY03 with rows for:

Personnel (Maintainers, Operators, Leaders)
- Fielding
- Official School Training
- Pre-Fielding Training
- Driver Training
- Field-Level Maintenance New Equipment Training
- Issue System
- Operational New Equipment Training
- Collective Training
- Mock-Up Training Aids

Acceptance Test Plan
- Equipment Delivery Flow
- Contractor-Furnished Equipment Production
- Deprocess
- Government-Furnished Equipment Fielding
- Government Furnished Equipment Production
- Acceptance Test Operation

MOAs & LOIs
- Prescribed Load List
- Maintenance
- Security Plan

Note: The time required for each step will be based on the program requirement.

Ongoing Concepts

Programmatic operations, such as improvements, must be addressed throughout the production and deployment phase. Several of these are depicted across the lower section of the transition concept figure. In addition to programmatic subjects, transition planning must also address all the ongoing tactical operations that occur throughout the fielding period. During this period, the system will be employed in tactical operations. In the process of fielding, items that are expended will need to be replaced, as will those that are updated through improvements. The plan must address all these items as they concurrently occur. Critical concepts, such as configuration management and product improvements, will develop a life of their own. The product office will need to determine how and when it will touch the fielded equipment again. It will need a plan to address how upgrades will be conducted, including associated cost estimates. In addition to preplanned product improvements and upgrades, the product manager must address sustainment concepts. Operational equipment will generate maintenance and usage data that will impact the management of repair parts, parts obsolescence, and introduction of product upgrades/improvements.

Maintenance planning will need to be addressed continuously, and the intensity of the planning will vary based on how many units are being fielded, where the fielding is being conducted, and other operations that impact the program. Program offices may need to set up contractor logistic support routine maintenance support facilities at the fielding locations, or they may need to establish a reset/refurbishment yard at another location to support a unit returning from an operation or provide indepen-

dent maintenance support operation forward to support a deployment. If the transition plan addresses maintenance concepts for such contingencies, the program is more likely be successful.

During low-rate initial production and the initial fielding in the deployment phase, the program office will be required to support testing. Primarily, there is the initial operational test with active duty servicemembers conducting a set of operational tasks to validate the system. Additionally, there will most likely be some form of follow-on test, as well as testing of product improvements. During these test processes, the program office may be required to provide logistic support, to test the equipment, and potentially provide the training for testers and servicemembers participating in the test. Product/system assets to support these tests must be planned for and funded. In programs such as the Stryker MGS, several system development and demonstration systems were dedicated solely for test assets throughout the life of the program. Some test assets may require refurbishment depending on the level of damage sustained during previous testing and must therefore be budgeted for in the financial plan of the program.

The transition plan will be a living document that is revised as a program evolves and as decisions, such as budget and fielding locations, are confirmed. The value in developing the transition plan early enough in the development process is that the effects of major acquisition and development decisions are thought through, documented, and budgeted. If used as a tool by the program manager, the transition plan will become a roadmap to a successful production/fielding effort. Because not all acquisition personnel have the opportunity of working many programs at different stages of the acquisition life cycle, this article has attempted to shed some light on this critical period in a program and will give the readers tools to help them develop their own program transition plan.